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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,808	09/06/2006	Karl Lerchbaum	1717743	4252
24240 7590 10/08/2008 CHAPMAN AND CUTLER 111 WEST MONROE STREET CHICAGO, IL 60603				
EXAMINER PATEL, VISHAL A				
ART UNIT 3676		PAPER NUMBER		
MAIL DATE 10/08/2008		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,808

**Applicant(s)**

LERCHBAUM ET AL.

**Examiner**

Vishal Patel

**Art Unit**

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, "sliding-ring gasket of stainless steel", unclear how two rings are forming a sliding ring gasket. One can say that a seal assembly or a sliding seal comprising two rings but how can a sliding ring gasket of stainless steel having two rings?

Claim 2, line 2, "DIN" and "X20 Cr13", unclear what this means. Furthermore standards and trademarks are not proper for claims. Standard are know to change over time which makes the claim(s) indefinite.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by

Takeda (JP. 58088267).

Takeda discloses a seal assembly having two rings that form sliding seal, each of the ring having a plane surface which is made of stainless steel, having a coating (coating formed by nitriding the chrome steel) on an annular part section (4), an inward section (e.g. section that is offset, as shown in figures 2 and 3) from the annular part section, the offset is formed by an angle, the annular part section is less than 30% of the radial reach of the end plane, the stainless steel is a chrome stainless steel and the stainless steel as best understood is same as applicants and would have hardness of 800-950N/M<sup>2</sup>. It is clear from drawings that the radial extend of 4 which has the coating is less than 30% of the radial width of the plane surface 5. The annular part section having coating forms annular sealing surfaces. The two rings contact each other to form a seal.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-6, 10-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Burr (US. 4,516,641). If applicant considers that the reference of Takeda does not teach the radial width of the annular sealing surface in claims 1-3 (e.g. less than 30%), the following rejection also applies.

Takeda discloses the invention substantially as claimed above but fails to disclose that the radial width of the wear-resistant coating is less than 25% or 30% of the end planes radial reach or is less than 3mm. Burr teaches a seal assembly having plurality of rings, each of the ring having annular sealing surface and an end plane, the sealing surface having a radial width that is less than 25% of the width of the end plane. It would have been obvious to one having ordinary skilled in the art at the time of the invention to have the radial width of Takeda to be less than 3mm or 25% of radial reach of the end plane as taught by Burr, to provide a sufficient contact for sealing or a minimal contact to reduce wear (less contact inherent means less wear).

8. Claims 4 and 7-9 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda in view of Peickii et al (US. 3,086,782).

Takeda discloses the invention substantially as claimed above but fails to disclose that the coating having a thickness of 0.3mm. Peickii discloses a coating that has a thickness as claimed by applicant. It would have been obvious to one skilled in the art at the time of the invention to have the coating of Takeda to have a thickness as taught by Peickii, to provide a coating with sufficient strength and heat resistance (column 3, lines 21-23 of Peickii).

9. Claims 4, 7-9, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda and Burr and further in view of Peickii et al (US. 3,086,782).

Takeda and Burr disclose the invention substantially as claimed above but fail to disclose that the coating having a thickness of 0.3mm. Peickii discloses a coating that has a thickness as claimed by applicant. It would have been obvious to one skilled in the art at the time of the invention to have the coating of Takeda to have a thickness as taught by Peickii, to provide a coating with sufficient strength and heat resistance (column 3, lines 21-23 of Peickii).

***Response to Arguments***

10. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./  
Primary Examiner, Art Unit 3676

/Vishal Patel/  
Primary Examiner, Art Unit 3676